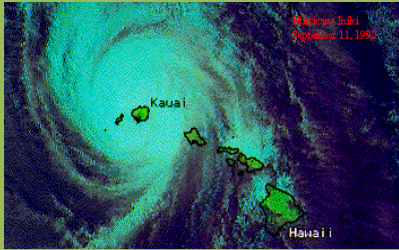


CLIMATE NEWS

From Sheldon Whitehouse, Barbara Boxer, and Jeff Merkley

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Hawaii to Get Twice as Many Cyclones by Century's End



On average, tropical cyclones hit Hawaii once every four years, and the last really destructive storm, Hurricane Iniki, hit in 1992. By 2075, however, rising ocean temperatures and changes in atmospheric circulation will make tropical cyclones twice as likely to hit the island state, and the storms themselves will be stronger. In a study published in *Nature Climate Change*, lead author Hiroyuki Murakami and his team looked at changes to tropical cyclones near Hawaii from 2075 to 2099. Murakami—a fellow at the University of Hawaii, Manoa—conducted his analysis in the future to better distinguish between the effects of climate change and natural variability. In his model, the average global temperature at the end of the century increases by a little more than 2°C from today's averages. The team ran its model many times, under slightly different scenarios, and the results consistently predicted more strong cyclones headed toward Hawaii. While the findings were not unexpected, this is the first time a study has projected what is likely to happen to cyclones in this part of the Pacific, said Gabriel Vecchi, a NOAA scientist who studies climate change and hurricane activity. (*ClimateWire/nclimate1890*)

Arctic Ocean 'Acidifying Rapidly', Says New Report

New research from the Arctic Monitoring and Assessment Programme (AMAP) found that carbon dioxide (CO₂) emissions are rapidly making the Arctic Ocean more acidic. AMAP is a working group of the Arctic Council, which is comprised of the eight countries with Arctic territory, including the U.S. AMAP says that even if CO₂ emissions stopped now, it would take tens of thousands of years for Arctic Ocean chemistry to revert to pre-industrial levels. The global average acidity of today's surface ocean waters is estimated to be about 30 percent higher than before the Industrial Revolution. The Arctic is especially susceptible to ocean acidification because CO₂ is absorbed faster in cold waters, and recent summer sea ice decreases have exposed more sea surface to atmospheric CO₂. The increasing flows of freshwater from rivers and melting land ice exacerbate this vulnerability because freshwater is less effective than seawater at neutralizing CO₂'s acidifying effects. The report forecasts significant ecosystem changes—noting that many species, including commercially valuable fish, could be affected. However, the dearth of Arctic-specific data on the economic effects of acidification makes it difficult to issue precise predictions. (*BBC*)

Federal Program Launches Climate and Health Data Tool

The interagency U.S. Global Change Research Program (USGCRP) has launched an online tool to bolster research into links between climate change and health. According to USGCRP executive director Tom Armstrong, the Metadata Access Tool for Climate and Health (MATCH) "is a publicly accessible digital platform for searching and integrating metadata—standardized contextual information—extracted from more than 9,000 health, environment, and climate-science datasets held by six Federal agencies." Armstrong noted that as climate change continues to boost the frequency and intensity of extreme weather, it has become more important to understand how these phenomena could affect—or, in some cases, are already affecting—the occurrence and severity of respiratory illness, diseases, heat stroke, and other conditions affecting millions of people across the world. Before MATCH, many of these records and datasets were stored in difficult-to-access agency archives or formats. (*The Hill/White House Blog*)

Nigerian Official Attributes Civil Unrest to Climate Change

In an appearance before the Nigerian House of Representatives Committee on Climate Change, Nigeria's National Security Adviser Colonel Sambo Dasuki pointed to climate change as the cause of widespread insecurity in his country. He said rising sea levels in the Niger Delta and increasing desertification in Northern Nigeria have disrupted local economies and forced young people out of traditional agricultural livelihoods. Many displaced young men have joined insurgent militant groups and criminal organizations, while those that managed to stay on as herdsman have been forced to migrate from their homes to find usable pastures, bringing them into conflict with crop farmers. Dasuki believes the establishment of national grazing fields and cattle routes would help prevent the violent, sometimes deadly clashes between herdsman and farmers. He also discussed last summer's flash floods—which killed hundreds and displaced millions of Nigerians—and called for better cooperation between federal, state, and local officials in preparing for climate-related disasters. (*EESI/AIIAfrica*) *Sheldon Whitehouse*